Although the floating action of this device was satisfactory, the driving or gripping power was found insufficient to hold the work securely, and it became necessary to replace the spring-pins with square-head set-screws, cup-pointed, the ring being tapped out to receive them. The ring was then allowed to float while these screws were lightly set up on the work after which the clamping screws N were tightened. After this change in construction, the action of the mechanism was much improved, and the driving power was found sufficient.

Floating Clamping Ring on Grinding Fixture. — The work A shown in Fig. 10, is a steel casting which is to be ground on the two exterior surfaces. A nose-piece D is screwed to the end of the spindle E and is provided with a hardened and ground locating ring B on which the work locates. The stud C is forced into the nose-piece and is threaded on its outer end to receive a spherical nut E. The collar E0 is concaved to the same radius as the spherical portion of the nut so that it floats against the end of the work.